**IN THE CLAIMS:**

1. (Currently Amended) A system for ensuring the qualifications of a an unsupervised workman to follow proper procedures for performing a covered task that is not subject to routine inspection and for which regulatory authorities have established required standards of proper performance, comprising:

means for providing the hardware and software for performing a covered task at a selectable remote location;

means provided by said hardware and software for interactively evaluating the unsupervised performance of a said covered task at said selectable location;

verifying by means of documenting the results of said interactive performance of said covered task; and

recording the site of the selectable location by means of a GPS system.

2. (Previously Presented) A system according to claim 1 wherein said covered task is selected from mechanical, heat fusion and electro-fusion.

3. (Previously Presented) A system according to claim 2 wherein a said mechanical covered task includes compression, bolt-on or stab-on connections.

4. (Previously Presented) A system according to claim 2 wherein said heat fusion covered task includes butt fusion, socket fusion or sidewall fusion.

5. (Previously Presented) A system according to claim 2 wherein said electro-fusion covered task includes in-line coupling fusion or saddle fusion.

6.-12. (Cancelled).

13. (Currently Amended) A method of documenting the qualifications and performance of an unsupervised workman to follow established procedures in the proper performance of a covered task at a selectable remote location that is not subject to routine inspection, comprising the steps of:

(a) at the selected location, measuring physical parameters employed by the unsupervised workman in the proper application, of steps required to complete the covered task;

(b) recording the ~~valves~~ values of parameters measured in step (a);

(c) comparing the values recorded in step (b) with established procedures for performing ~~the~~ said covered task; and

(d) providing a record of the results of step (c) to thereby document the qualifications and performance of the workman.

14. (Previously Presented) A method according to claim 13 wherein step (a) includes measuring the voltage, current, and time of application of voltage applied to electric heat weldable fittings.

15. (Previously Presented) A method according to claim 13 including measuring the applicable ambient temperature.

16. (Previously Presented) A method according to claim 13 wherein apparatus used in performing the covered task has thereon a bar code having encoded information relating to said established procedures for (welding application thereof) performing the covered task and including the step of reading said bar code and employing information obtained therefrom to provide at least a portion of said established procedures.

17. (Previously Presented) A method according to claim 13 including the step of storing said record of the results of step (d).

18. (Previously Presented) A method according to claim 17 including the step of printing out a permanent record of the results of step (d) whereby the qualifications of a workman can be preserved.

19. (Previously Presented) A method according to claim13, including:

identifying and recording said selectable location.

20. (Previously Presented) A method according to claim 19, wherein identifying and recording said selectable location includes utilizing global positioning system instrumentation.

21. (Currently Amended) A system to document the qualification of an unsupervised workman to perform a covered task at a selectable location that is not subject to routine inspection and for which regulatory authorities or industries have established required standards of proper performance, comprising:

means for providing at a said selectable location an environment permitting the workman to physically interact with the subject matter making up the covered task;

means providing hardware and software by which a workman can properly perform a said covered task by the completion of a predefined sequence of steps;

means permitting the workman to physically perform said steps required to complete said covered task;

means to provide a performance record of steps taken by said workman in ~~the~~ performance of said covered task;

means employing said hardware and software to evaluate said performance record to provide an indication of the qualification of said workman to properly perform said covered task; and

means to record, for purposes of documentation, said performance record.

22. (Previously Presented) A system according to claim 21 wherein said covered task is selected from mechanical, heat fusion and electro-fusion covered tasks.

23. (Previously Presented) A system according to claim 22 wherein said mechanical covered task is selected from compression, bolt-on or stab-on connections covered tasks.

24. (Previously Presented) A system according to claim 21 wherein said covered task is for joining polyethylene pipe and fittings by heat fusion and wherein said heat fusion covered tasks include butt fusion, socket fusion or sidewall fusion and wherein said hardware includes infrared thermometer instrumentation for measuring surface temperature of heat fusable components.

25. (Previously Presented) A system according to claim 21 wherein said covered task covers in-line coupling fusion or saddle fusion.

26. (Previously Presented) A system according to claim 21 wherein said covered task includes the application of electrical energy to an electric heat weldable thermoplastic fitting to weld the fitting to a thermoplastic pipe and wherein said hardware includes:

a voltage source;

a microprocessor operated voltage control circuit connected to said voltage source and having an output removably connectable to an electric heat weldable thermoplastic fitting;

an amperage measurement circuit in association with said voltage control circuit for determining current flow through said heat weldable thermoplastic fitting; and

an input system connected to said voltage control circuit to impart characteristics of the weldable thermoplastic fitting and ambient conditions, the voltage control system serving to apply proper voltage for a determined time to complete thermoplastic welding of the fitting to a thermoplastic pipe.

27. (Previously Presented) A system according to claim 26 wherein said covered task includes the application of electrical energy to an electric heat weldable thermoplastic fitting and including;

an ambient temperature circuit forming a part of said input system.

28. (Previously Presented) A system according to claim 26 wherein said covered task includes controlling the application of electrical energy to an electric heat weldable thermoplastic fitting and wherein said hardware includes;

a sensor for detecting the temperature of said weldable thermoplastic fitting; and

a logic circuit responsive to said sensor forming a part of said input system.

29. (Previously Presented) A system according to claim 26 wherein said covered task includes controlling the application of electrical energy to an electric heat weldable thermoplastic fitting and wherein said hardware includes;

feed-back logic circuitry interconnected between said weldable thermoplastic fitting and said voltage control circuit.

30. (Previously Presented) A system according to claim 21 wherein said covered task includes controlling the application of electrical energy to an electric heat weldable thermoplastic fitting and wherein said weldable thermoplastic fitting has thereon a bar code having encoded information relating to requirements for to successful welding application thereof and wherein said hardware includes an input system having a bar code reader.

31. (Previously Presented) A system according to claim 21 wherein said covered task includes controlling the application of electrical energy to an electric heat weldable thermoplastic fitting and wherein said hardware includes an information storage system in communication with an input system by which information as to the parameters employed in the application of an electric heat weldable thermoplastic fitting to a thermoplastic pipe are stored.

32. (Previously Presented) A system according to claim 21 wherein said covered task includes controlling the application of electrical energy to an electric heat weldable thermoplastic fitting and wherein said hardware includes a printer in communication with an information storage system for providing a print out of details of welding said electric heat weldable thermoplastic fitting to a plastic pipe.

33. (Previously Presented) A system according to claim 21 including:

means for identifying and recording the location of the site of said covered task.

34. (Previously Presented) A system according to claim 33 wherein said means for identifying and recording the location of the site of said covered task includes global positioning system instrumentation.

35. (Currently Amended) A method of documenting the qualifications and performance of an unsupervised workman to properly perform a task for which regulatory authorities or industries have established required procedural standards, referred to as a covered task and that is not subject to routine inspection, comprising:

providing hardware and software for performing a said covered task by completion of a predetermined sequence of steps;

permitting the unsupervised workman to perform said covered task employing said hardware and software;

making a record of each step taken by said workman;

providing an evaluation of said record as an indication of the qualification of said workman to properly perform ~~the~~ said covered task; and

preserving said evaluation as documentation of the workman's qualifications to properly perform said covered task.

36. (Previously Presented) A method of ensuring the qualification of a workman according to claim 35 in which the covered task is the installation of an electric heat weldable thermoplastic fitting having thereon a bar code having encoded information relating to requirements for the successful installation thereof and including the step of reading said bar code and employing information obtained therefrom in the evaluation of said workman.

37. (Previously Presented) A method of ensuring the qualification of a workman according to claim 35 including the step of printing out a permanent record of each step employed by said workman whereby if a workman fails to achieve qualification, the reason therefor may be identified.

38. (Previously Presented) A method according to claim 35 including the step of identifying and recording the location of the site of said covered task.

39. (Previously Presented) A method according to claim 38 wherein said step for identifying and recording the location of the site of said covered task includes the use of global positioning system instrumentation.